Amendments to the Claims

Please amend the claims as indicated in the following listing of the claims, which replaces all prior versions of the claims in the application.

1. (Currently Amended)   A method of generating an image sequence of an object within a scene, comprising:

capturing an image of the object with a plurality of <u>networked variable pointing</u> camera systems, wherein the camera systems are positioned around the scene<u>, and wherein pointing and optical parameters from a first of the camera systems and mapping data for the camera systems are used to compute pointing and optical parameters for the remainder of the camera systems such that, at a point in time, the camera systems are aimed at the object and a size of the object in images from each of the camera systems is substantially the same</u>;

2D projective transforming certain of the images <u>captured by the camera systems</u> such that a point of interest in each of the images is at a same position as a point of interest in a first image from one of the camera systems; and

outputting the 2D projective transformed images and the first image in a sequence corresponding to a positioning of the corresponding camera systems around the scene.

2. (Canceled)

3. (Currently Amended)   The method of claim ~~2~~ <u>1</u>, wherein capturing the image of the object with ~~a~~ <u>the</u> plurality of camera systems includes capturing the image of the object at the same instant in time with the plurality of camera systems.

2

4. (Original)   The method of claim 3, further comprising receiving an input corresponding to the particular point in time.

5. (Currently Amended)   The method of claim 2 1, further comprising, after capturing the images, receiving an input corresponding to the point of interest from a user via a user interface for each of the images.

6. (Original)   The method of claim 1, wherein capturing the images includes capturing an image with a plurality of pan/tilt camera systems positioned around the scene.

Currently Amended
7. (Original)   A system for generating an image sequence of an object within a scene, comprising:

a plurality of networked variable pointing camera systems positioned around the scene;

means for determining, based on pointing and optical parameters from a first of the variable pointing camera system and mapping data for the camera systems, pointing and optical parameters for the remainder of the variable pointing camera systems such that, at a point in time, the camera systems are aimed at the object and a size of the object in images from the camera systems is substantially the same;

means for controlling the remainder of the variable pointing camera systems based on the determined pointing and optical parameters for the remainder of the camera systems;

storage means for storing images captured by the plurality of camera systems a first image of the object from a first camera system;

3

~~means for storing an image of the object from a plurality of camera systems, wherein the~~

~~first camera system and the plurality of camera systems are positioned around the scene;~~ and

a frame-sequencing module <u>in communication with the storage means</u> for 2D projective

transforming ~~the~~ <u>stored</u> images ~~from the plurality of camera systems~~ such that a point of interest

in ~~each of the~~ images from <u>each of</u> the plurality of camera systems is at ~~a~~ <u>the</u> same position ~~as a~~

~~point of interest in the first image~~.

8. (Currently Amended)   The system of claim 7, wherein the frame-sequencing

module is further for outputting ~~the first image and the~~ images from the plurality of camera

systems in sequence corresponding to the positioning of the ~~first camera system and the plurality~~

~~of~~ camera systems around the scene.

9. (Currently Amended)   The system of claim 8, wherein <u>the images from the camera</u>

<u>systems are from the same point in time</u>~~:~~

~~the means for storing the first image includes means for storing an image captured by the~~

~~first camera system at a particular time; and~~

~~the means for storing the image from a plurality of camera systems includes means for~~

~~storing an image captured by each of the camera systems at the particular time~~.

10. (Currently Amended)   The system of claim 9, further comprising an interface

module in communication with the frame-sequencing module for allowing an operator to specify

the ~~particular~~ point in time.

4

11. (Currently Amended)   The system of claim 8, further comprising an interface

module for allowing the operator to specify the point of interest ~~in the first image and in the~~

~~images of the plurality of camera systems~~.

12. (Currently Amended)   The system of claim 8, wherein the frame-sequencing

module is for outputting ~~the first image and~~ the images from the plurality of camera systems in

~~one of~~ a clockwise sequence ~~and a counterclockwise sequence~~.

13. (Canceled)

14. (Currently Amended)   A system for generating an image sequence of an object

within a scene, comprising:

a plurality of networked variable pointing camera systems positioned around the scene;

means, based on pointing and optical parameters from a first of the variable pointing

camera system and mapping data for the computer system, for determining pointing and optical

parameters for the remainder of the variable pointing camera systems such that, at a point in

time, the camera systems are aimed at the object and a size of the object in images from the

camera systems is substantially the same;

means for controlling the remainder of the variable pointing camera systems based on the

determined poitning and optical parameters for the remainder of the camera systems;

storage means for storing ~~a first image of the object from a first camera system~~ images

captured by the camera systems;

5

~~means for storing an image of the object from a plurality of camera systems, wherein the~~

~~first camera system and the plurality of camera systems are positioned around the scene;~~ and

means, in communication with the storage means, for 2D projective transforming the

images from the plurality of camera systems such that a point of interest in ~~each of the~~ images

from each of the plurality of camera systems is at the ~~a~~ same position ~~as a point of interest in the~~

~~first image.~~

15. (Currently Amended)   The system of claim 14, further comprising means for

outputting the ~~first image and the~~ images from the plurality of camera systems in sequence

corresponding to the positioning of the ~~first camera system and the plurality of~~ camera systems

around the scene.

16. (Currently Amended)   The system of claim 15, wherein the images from the

camera systems are from the same point in time~~:~~

~~the means for storing the first image includes means for storing an image captured by the~~

~~first camera system at a particular time; and~~

~~the means for storing the image from a plurality of camera systems includes means for~~

~~storing an image captured by each of the camera systems at the particular time.~~

17. (Currently Amended)   The system of claim 16, further comprising means for

allowing an operator to specify the ~~particular~~ point in time.

6

18. (Currently Amended)   The system of claim 15, further comprising means for allowing the operator to specify the point of interest ~~in the first image and in the images of the plurality of camera systems~~.

19. (Currently Amended)   A system, comprising:

a plurality of pan/tilt camera systems positioned around a scene;

~~and controlled such that each camera system~~ means for controlling the camera systems based on computed pointing and optical parameters for certain of the camera systems, wherein the pointing and optical parameters are computed based on pointing and optical parameters from at least one of the camera systems and based on mapping data for the camera systems, such that each camera system is aimed at a target within the scene and such that a size of the target in an image from each camera system is substantially the same at a particular time; ~~and~~

a video storage unit in communication with each pan/tilt camera system for storing images captured by each camera system; and

a frame-sequencing module in communication with the video storage unit, wherein the frame-sequencing module is for 2D projective transforming images from certain of the camera systems such that a point of interest in an untransformed image from one of the camera systems is at a same position as a point of interest in each of the 2D projective transformed images.

20. (Original)   The system of claim 19, wherein the frame-sequencing module is further for outputting the 2D projective transformed images and the untransformed image in sequence corresponding to the positioning of the corresponding camera systems around the scene.

7

21. (Currently Amended)   The system of claim 19, further comprising an interface module for allowing ~~the~~ <u>an</u> operator to specify the point of interest in the untransformed image and in the 2D projective transformed images.

22-29 (Canceled)

30. (New)   The method of claim 1, further comprising determining the mapping data for the computer systems by:

determining the pose of each camera system with respect to the scene;

determining the relationship of a zoom control parameter to the angular field of view for each camera system; and

determining the relationship of a focus control parameter to the distance to objects for each camera system.

31. (New)   The system of claim 7, wherein the mapping data includes:

data regarding the pose of each camera system with respect to the scene;

data regarding the relationship of a zoom control parameter to the angular field of view for each camera system; and

8

data regarding the relationship of a focus control parameter to the distance to objects for
each camera system.

32. (New)   The system of claim 14, wherein the mapping data includes:

data regarding the pose of each camera system with respect to the scene;

data regarding the relationship of a zoom control parameter to the angular field of view

for each camera system; and

data regarding the relationship of a focus control parameter to the distance to objects for

each camera system.

33. (New)   The system of claim 19, wherein the mapping data includes:

data regarding the pose of each camera system with respect to the scene;

data regarding the relationship of a zoom control parameter to the angular field of view

for each camera system; and

data regarding the relationship of a focus control parameter to the distance to objects for

each camera system.

9